## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-016292

Address: 333 Burma Road **Date Inspected:** 20-Aug-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Li Yang **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Weld Procedures Followed:** N/A **Electrode to specification:** Yes No Yes No Yes N/A N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** OBG

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

TRIAL ASSEMBLY YARD

**ULTRASONIC TESTING** 

**OBG SEGMENT 10AW** 

ABF Report No: UT-10W-021

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a separate data sheet that Caltrans QA generates after performing a joint inspection with ABF ultrasonic testing personnel. The location of the inspection was identified as the hold back weld between side panel and edge panel of OBG segment 10AW at 9EW on cross beam side. The weld designations were as follows:

SEG059A-039 (OBG 10AW, EP to SP, CB side @ 9EW)

**OBG SEGMENT 9DW-9CW** ABF Request No: 08202010-1



# WELDING INSPECTION REPORT

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This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a separate data sheet that Caltrans QA generates after performing a joint inspection with ABF ultrasonic testing personnel. The location of the inspection was identified as the deck panel splice weld between OBG segment 9CW and 9DW. Inspection was carried out on repair areas only. The weld designations were as follows:

OBW9A-003, 002, 004

#### MAGNETIC PARTICLE TESTING

#### ZPMC NWIT: 06443

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the length previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an (MT) report on this date. The members are identified as deck panel splice weld between OBG segment 9CW and 9DW. The weld designations are as follows:

OBW9-008, 009, 007

#### TRIAL ASSEMBLY YARD

This QA Inspector randomly observed the following work in progress.

#### **OBG SEGMENT 10AW-10BW**

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067665 performing the Shielded Metal Arc Welding process on weld 002 located at PCMK OBW10B. ZPMC QC Mr. Shi Lei was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-B-u2-f-1.

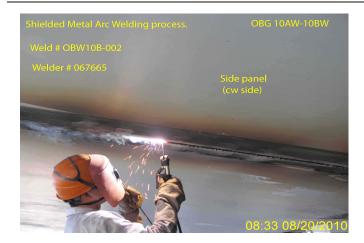
This Quality Assurance (QA) Inspector observed ZPMC qualified welder 205098 performing the Shielded Metal Arc Welding process on weld 043 located at PCMK SEG051B. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-3345-SMAW-3G (3F)-FCM-repair. Weld repair report identified as B-WR14516

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 040759 performing the Flux Cored Arc Welding process on weld 005 located at PCMK CA071. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u4b-f-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

No significant conversations were reported on this date.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer